

REMARKS

As of May 19, 2003, the date of the Final Office Action to which this paper is responsive, claims 1-13, 15, 18, and 20-29 were pending. Claims 30-37 have been added. The following issues raised by the Office in the Official Action will be discussed: I) Claims 1, 13, 20, 23, 25, 27, 2-5, 7-12, 15 and 24 and 26 were rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,415,388 issued to Browning et.al. (Browning); II) Claims 18 and 21 were rejected under 35 U.S.C. §103(a) as being unpatentable over Browning in view of U.S. Patent No. 6,172,611 issued to Hussain et. al. (Hussain); and III) Claims 6, 22, 28 and 29 were objected to as being dependent upon rejected base claims. The addition of claims 30-37 will be discussed in Section IV. For the reasons set forth below, the Applicant submits that all pending claims in the presently considered application are in condition for allowance, and respectfully requests such allowance.

I) Rejection of Claims 1-5, 7-12, 15, 20, and 23-27 under 35 U.S.C. §102(e)Claim 1

The Office rejected independent claim 1 under 35 U.S.C. §102(e) as being anticipated by Browning. The Office asserts that Browning teaches “a programmable storage location storing a first temperature limit value,” as recited in the Applicant’s independent claim 1. In support of its assertion, the Office points to Browning at Col 7, lines 8-22. The referenced text follows:

Example applications for the power monitoring apparatus and processes of the present invention include *programmable battery life* for a portable PC. If a user has a requirement for a portable PC to operate for a desired time period (a three-hour flight, for example), the portable PC’s microprocessor may be *programmed to run as fast as possible*, but last for the entire time period. The system disclosed herein could then monitor the power consumption of the portable PC’s microprocessor and *adjust it* [i.e. the power consumption] to maintain the desired battery life, while running as fast as possible within this constraint. In other application, a computer system’s cost may be reduced by using a less powerful supply and a less

extensive cooling system in conjunction with the throttling process and apparatus disclosed herein. [The emphasis and material enclosed within [] were added.]

The Applicant respectfully submits that although Browning may teach programmable voltage or programmable battery life, Browning does not teach or suggest a programmable storage location storing a first temperature limit value. Instead, Browning teaches that, far from being programmable, “The optimal temperature range T1-T2 is predetermined and set by the system designer of the computer...” (Browning, Col. 4, Ln. 55-57). Applicant submits, therefore, that Browning teaches *a fixed temperature range*.

Since Browning does not teach a programmable storage location storing a temperature limit value as recited in Applicant’s independent claim 1, the Applicant submits that Browning does not teach or suggest each and every element of claim 1. Consequently, Browning does not support a *prima facie* case for rejection of independent claim 1 under 35 U.S.C. §102(e), and Applicant respectfully requests the Office to withdraw its rejection.

Claim 13

Claim 13 has been amended to clarify that the first output terminal is deasserted in response to either a control location being accessed or in response to the measured temperature going below a lower limit. No new matter has been added.

The Office rejected independent claim 13 under 35 U.S.C. §102(e) as being anticipated by Browning. In support of its rejection, the Office asserts that Browning teaches “the signal on the first output terminal is deasserted when a control location on the integrated circuit is accessed.” The applicant respectfully submits that Browning does not teach or suggest causing the output to be deasserted *when a control location is accessed*. The Office points to no specific figure or text in Browning that shows, discusses or suggests that the output signal is deasserted by accessing a control location. On the contrary, Applicant can find no mention of deasserting the output signal in Browning other than in response to the temperature coming within a predetermined range.

Furthermore, the Applicant submits that Browning does not teach providing two options for deasserting an output signal. Applicant's claim 13 recites "the signal on the first output terminal is deasserted *in response to a either control location on the integrated circuit being accessed or the measured temperature falling below a lower limit value*, according to a programmable mode of operation."

Since Browning does not teach deasserting the output signal *when a control location is accessed, or when the measured temperature goes below a lower limit value*, the Applicant submits that Browning does not teach or suggest each and every element of claim 13. Consequently, Browning does not support a *prima facie* case for rejection of independent claim 13 under 35 U.S.C. §102(e), and Applicant respectfully requests the Office to withdraw its rejection.

Claim 20

The Office rejected independent claim 20 under 35 U.S.C. §102(e) as being anticipated by Browning. In support of its rejection, the Office asserts that Browning teaches "accessing a control location in the integrated circuit to cause the signal to be deasserted." The Applicant respectfully submits that the elements of FIG. 6 and the text in Col. 7, cited by the Office in support of its proposition, do not teach or suggest causing a signal to be deasserted by accessing a control location. The Applicant wishes to contrast the specific language of claim 20 regarding deasserting a signal by accessing a control location, with the FIG. 6 of Browning that teaches deasserting a signal *in response to the temperature being in/out of range*. Browning does not teach a control location for deasserting the signal.

Since Browning does not teach *accessing a control location in the integrated circuit to cause the signal to be deasserted*, the Applicant submits that Browning does not teach or suggest each and every element of independent claim 20. Consequently, Browning does not support a *prima facie* case for rejection of independent claim 20 under 35 U.S.C. §102(e), and Applicant respectfully requests the Office to withdraw its rejection.

Claim 23

The Office rejected independent claim 23 under 35 U.S.C. §102(e) as being anticipated by Browning. The Office states that Browning teaches two different outputs to provide two different temperature comparison signals. Taking the Office's statements as true for the sake of argument, the Applicant respectfully submits that Browning does not teach the same types of signals as claimed by Applicant in independent claim 23, nor does Browning address the relationship of the signals to the outputs. Claim 23 recites a method that generates a signal on a first output terminal according to a temperature comparison to a first limit *to control the temperature of the circuit*, and asserts a second signal on a second output terminal when the temperature is above the second limit *to indicate that the temperature has exceeded a safe limit*. Note that Browning, in FIG. 7, uses a signal to either raise a supply voltage (460)/raise clock speed (470), or to lower clock speed (440)/ decrease supply voltage (450). Browning does not teach or suggest using *one of the signals to control the temperature and the other signal as an indicator*.

Browning does not teach "generating a signal on a first output terminal of the integrated circuit according to the comparison to control the temperature of the integrated circuit;" and "asserting a second signal on a second output terminal of the integrated circuit when the measured temperature is above the second limit value, thereby indicating that the temperature has exceeded a safe limit." The Applicant submits, therefore, that Browning does not teach or suggest each and every element of independent claim 23. Consequently, Browning does not support a *prima facie* case for rejection of independent claim 23 under 35 U.S.C. §102(e), and Applicant respectfully requests the Office to withdraw its rejection.

Claim 25

The Office rejected independent claim 25 under 35 U.S.C. §102(e) as being anticipated by Browning. The Applicant has amended claim 25 to recite means for providing a first signal on a first output terminal to control the temperature of the integrated circuit, and means for providing a second signal on a second output terminal indicating that the temperature has exceeded a safe limit. As noted above in the discussion of claim 23, Browning does not teach or suggest using *one of the signals to control the temperature and the other signal as an indicator*.

The Applicant submits, therefore, that Browning does not teach or suggest each element of claim 25 as amended. Consequently, Browning does not support a prima facie case for rejection of amended claim 25 under 35 U.S.C. §102(e). Applicant respectfully requests the Office to withdraw its rejection, and allow amended independent claim 25 to issue.

Claim 27

The Office rejected independent claim 27 under 35 U.S.C. §102(e) as being anticipated by Browning. The Office asserts that Browning discloses a microprocessor comprising at least a first and second temperature limit value stored in programmable storage locations. As noted above in the discussion regarding claim 1, the Applicant's position is that Browning does not disclose programmable temperature limits in general, nor storing first and second temperature limits in programmable storage locations as recited in claim 27. The Applicant submits, therefore, that Browning does not teach or suggest each element of independent claim 27 as originally filed. Consequently, Browning does not support a prima facie case for rejection of independent claim 27 under 35 U.S.C. §102(e). Applicant respectfully requests, therefore, that the Office withdraw its rejection, and allow independent claim 27 to issue.

Claims 2-5, 7-12, 15, 24, and 26

The Applicant has amended claim 7 to correct a grammatical error.

The Office rejected dependent claims 2-5, 7-12, 15, 24, and 26 under 35 U.S.C. §102(e) as being anticipated by Browning. For reasons previously stated, the applicant submits that independent claims 1, 13 20, 23, 25, and 27 are all allowable. Inasmuch as claims 2-5, 7-12, 15, 24, and 26 depend from allowable independent claims 1, 13 20, 23, 25, or 27, the dependent claims are themselves allowable. The Applicant respectfully requests, therefore, that the Office withdraw its rejection of claims 2-5, 7-12, 15, 24, and 26, and allow these claims to issue.

II) Rejection of Claims 18 and 21 under 35 U.S.C. §103(a)

The Applicant has amended claim 18, which previously depended from cancelled claim 16, to properly recite dependence from claim 13.

The Office rejected claims 18 and 21 under 35 U.S.C. §103(a) as being unpatentable over Browning in view of Hussain. For the reasons stated above, the applicant submits that independent claims 13 and 20, from which claims 18 and 21 respectively depend, are allowable. Inasmuch as claims 18 and 21 depend from allowable independent claims, the Applicant submits that claims 18 and 21 are themselves allowable. The Applicant respectfully requests, therefore, that the Office withdraw its rejection of claims 18 and 21, and allow these claims to issue.

III) Objection to Claims 6, 22, 28, and 29

For the reasons stated above, the applicant submits that claims 1, 21, and 27 are all allowable. Inasmuch as claims 6, 22, 28 and 29 depend from allowable claims 1, 21, or 27, claims 6, 22, 28, and 29 are themselves allowable. The Applicant respectfully requests, therefore, that the Office withdraw its rejection of claims 6, 22, 28 and 29, and allow these claims to issue.

IV) Addition of Claims 30-37

Claims 30-37 have been added to more fully claim various aspects of the Applicant's invention. Claims 30-37 are fully supported by the specification as originally filed; no new matter has been added.

CONCLUSION

In summary, claims 1-13, 15, 18, 20-29 and new claims 30-37 are in the case. All claims are believed to be allowable over the art of record, and a Notice of Allowance to that effect is respectfully solicited. Nonetheless, if any issues remain that could be more efficiently handled by telephone, the Examiner is requested to call the undersigned at the number listed below.

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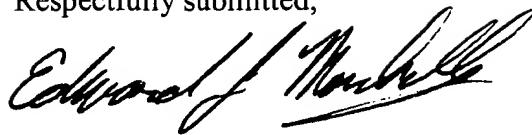
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Date

Respectfully submitted,



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